

Listing of Claims and Amendments thereto:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Amended) A printed circuit board mounted on a reel, comprising:
 - an elongated, flexible base board having opposite edges and a slit formed into it, the slit having an inner periphery defining a unit board within the flexible base board; and
 - at least one connection bar having an axis that is oriented perpendicular to a direction of travel at which the printed circuit board is removed from or wound onto the reel, the connection bar connecting the unit board to the base board such that the unit board is pivotable on the connection bar relative to the base board.
2. (Currently Amended) The circuit board of Claim 1, further comprising:
 - a bonding pad on a top surface of the unit board;
 - a contact on a bottom surface of the unit board; and,
 - a via hole through the unit board electrically connecting the bonding pad to the contact.
3. (Original) The circuit board of Claim 2, wherein the contact comprises a layer of copper plated with gold.
4. (Original) The circuit board of Claim 1, further comprising a dam inside the inner periphery of the slit.
5. (Original) The circuit board of Claim 1, wherein the base board is made of a glass-epoxy material.
6. (Original) The circuit board of Claim 1, wherein the base board includes a sprocket hole along at least one of the edges thereof.

7. (Original) The circuit board of Claim 1, wherein the base board includes a position hole along one of the edges thereof.
8. (Currently Amended) The circuit board of Claim 2, further comprising:
a semiconductor chip attached to an upper surface of the unit board, the chip having a connection pad on an upper surface thereof; and,
a conductive wire having opposite ends, each bonded to a respective one of the bonding pad on the unit board and the connection pad on the chip.
9. (Currently Amended) The circuit board of Claim 8, further comprising an encapsulant formed on the top surface of the unit board and encapsulating a region including the chip, the conductive wire, the bonding pad, and the connection pad.
21. (Previously Amended) An apparatus mounted on a reel, comprising:
a flexible base board; and
a plurality of unit boards disposed within the flexible base board, the plurality of unit boards connected to the flexible base board by at least one connection bar having an axis that is oriented perpendicular to a direction of travel at which the apparatus is removed from or wound onto a reel, wherein each unit board is pivotable on its respective connection bar(s).
- ~~11~~22. (Currently Amended) The apparatus of Claim ~~11~~21, further comprising:
bonding pads on a top surface of the unit boards;
contacts on a bottom surface of the unit boards; and
via holes through the unit boards electrically connecting the bonding pads to the contacts.
- ~~12~~23. (Currently Amended) The apparatus of Claim ~~11~~22, wherein the contacts comprises a layer of copper plated with gold.
- ~~13~~24. (Currently Amended) The apparatus of Claim ~~10~~21, wherein the base board has opposite edges and a slit formed therein, further comprising dams disposed at the periphery of the slit.

~~1425~~. (Currently Amended) The apparatus of Claim ~~14021~~, wherein the base boards ~~are~~ is made of a glass-epoxy material.

~~1526~~. (Currently Amended) The apparatus of Claim ~~14021~~, wherein the base boards includes a sprocket hole along at least one of the edges thereof.

~~1627~~. (Currently Amended) The apparatus of Claim ~~14021~~, wherein the base boards includes a position hole along one of the edges thereof.

~~1728~~. (Currently Amended) The apparatus of Claim ~~1422~~, further comprising:
semiconductor chips attached to an upper surface of the unit boards, the chips having connection pads on an upper surface thereof; and
conductive wires having opposite ends, each bonded to a respective one of the bonding pads on the unit boards and the connection pads on the chips.

~~1829~~. (Currently Amended) The apparatus of Claim ~~1728~~, further comprising a protective cover formed on the top surfaces of the unit boards.

30. (Previously Amended) A printed circuit board mounted on a reel, comprising:
an elongated, flexible base board having opposite edges and a slit formed into it, the slit having an inner periphery defining a unit board within the flexible base board; and
one or more connection bars connecting the unit board to the base board, the connection bar(s) being disposed such that an axis of the connection bar(s) is perpendicular to a direction of travel of the printed circuit board on the reel.

~~2031~~. (Currently Amended) The circuit board of Claim ~~1930~~, further comprising:
a bonding pad on a top surface of the unit board;
a contact on a bottom surface of the unit board; and
a via hole through the unit board electrically connecting the bonding pad to the contact.

2132. (Currently Amended) The circuit board of Claim 2031, wherein the contact comprises a layer of copper plated with gold.

2233. (Currently Amended) The circuit board of Claim 1930, further comprising a dam inside the inner periphery of the slit.

2334. (Currently Amended) The circuit board of Claim 1930, wherein the base board is made of a glass-epoxy material.

2435. (Currently Amended) The circuit board of Claim 1930, wherein the base board includes a sprocket hole along at least one of the edges thereof.

2536. (Currently Amended) The circuit board of Claim 1930, wherein the base board includes a position hole along one of the edges thereof.

2637. (Currently Amended) The circuit board of Claim 2031, further comprising:

a semiconductor chip attached to an upper surface of the unit board, the chip having a connection pad on an upper surface thereof; and,

a conductive wire having opposite ends, each bonded to a respective one of the bonding pad on the unit board and the connection pad on the chip.

2738. (Currently Amended) The circuit board of Claim 2637, further comprising an encapsulant formed on the top surface of the unit board and encapsulating a region including the chip, the conductive wire, the bonding pad, and the connection pad.

39. (Previously Added) The circuit board of Claim 1, wherein the slit is formed around a circumference of the unit board so that the unit board lay substantially flat, even with the flexible base board retaining a curved shape from being wound onto or from the reel.

40. (Previously Added) The circuit board of Claim 1, wherein the at least one connection bar remains substantially straight as the printed circuit board is wound onto or off of the reel.
41. (Previously Added) The apparatus of Claim 21, wherein the slit is formed around a circumference of the unit board so that the unit board lay substantially flat, even with the flexible base board retaining a curved shape from being wound onto or from the reel.
42. (Currently Added) The apparatus ~~board~~ of Claim 21, wherein the at least one connection bar remains substantially straight as the apparatus is wound onto or off of the reel.
43. (Previously Added) The circuit board of Claim 30, wherein the slit is formed around a circumference of the unit board so that the unit board lay substantially flat, even with the flexible base board retaining a curved shape from being wound onto or from the reel.
44. (Previously Added) The circuit board of Claim 30, wherein the connection bar(s) remain substantially straight as the printed circuit board is wound onto or off of the reel.
45. (Previously Added) A printed circuit board, comprising:
 an elongated base board having a substantially curved shape, the elongated base board having opposite edges and a slit formed into it, the slit having an inner periphery defining a unit board within the base board; and
 at least one connection bar connecting the unit board to the base board so that the unit board is pivotable on the connection bar relative to the base board, and so that the connection bar remains substantially flat, even with the base board retaining a substantially curved shape.
46. (Previously Added) The circuit board of Claim 45, wherein the slit is formed around a circumference of the unit board so that the unit board lay substantially flat, the base board retaining a curved shape from being wound onto or removed from a reel.

47. (Previously Added) The printed circuit board of Claim 45, wherein the base board has a substantially curved shape due to being mounted on a reel.